

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (Original): Oxidised zinc compound in the form of micro-spherules consisting of smaller unitary particles having a Flodex index of less than 15.

Claim 2 (Previously presented): Oxidised zinc compound according to Claim 1, having a Flodex index of less than 10.

Claim 3 (Previously presented): Oxidised zinc compound according to Claim 1 having a compressibility index $[(\text{packed density} - \text{apparent density}) \times 100 / \text{packed density}]$ of less than 20%.

Claim 4 (Previously presented): Oxidised zinc compound according to Claim 3, having a compressibility index of less than 15%.

Claim 5 (Previously presented): Oxidised zinc compound according to claim 1, having a BET specific surface of less than $100 \text{ m}^2/\text{g}$.

Claim 6 (Previously presented): Oxidised zinc compound according to Claim 5, having a BET specific surface of less than $50 \text{ m}^2/\text{g}$.

Claim 7 (Previously presented): Oxidised zinc compound according to claim 1, wherein the micro-spherules have a D_{50} (size corresponding to 50% of the total granulometric distribution curve) of between approximately 50 and approximately 200 μm .

Claim 8 (Previously presented): Oxidised zinc compound according to Claim 7, wherein the micro-spherules have a D_{50} of between approximately 50 and approximately 100 μm .

Claim 9 (Previously presented): Oxidised zinc compound according to claim 1, wherein the micro-spherules consist of smaller unitary particles having a D_{50} of between approximately 1 and approximately 15 μm , without binder.

Claim 10 (Previously presented): Oxidised zinc compound according to claim 1, selected from the group consisting of a zinc oxide, a zinc hydroxide, a zinc carbonate, a zinc hydroxycarbonate or a mixture of these.

Claim 11 (Withdrawn - currently amended): Method of preparing an oxidised zinc compound in the form according to claim 1 of micro-spherules consisting of smaller unitary particles having a Flodex index of less than 15, comprising the step of injecting, by a nozzle, an aqueous

suspension of the said oxidised zinc compound, having a solid matter content of 25% to 70% by weight, at a pressure of approximately 10 to approximately 100 bar, within an atomisation chamber (4), in a stream of gas entering at a temperature of approximately 250° to approximately 800°C and emerging at a temperature of approximately 50° to approximately 300°C.

Claim 12 (Withdrawn): Method according to Claim 11, wherein the solid matter content is between 40% and 45% by weight in the aqueous suspension.

Claim 13 (Withdrawn – currently amended): Method according to Claim 11, wherein the aqueous suspension has a solid matter content of between 45% and 70% by weight, and ~~in that~~ a dispersing agent, such as a polyacrylate, is added to the said suspension.

Claim 14 (Withdrawn): Method according to Claim 11, wherein the injection pressure is between approximately 15 and approximately 80 bar.

Claim 15 (Withdrawn – currently amended): Method according to Claim 11, wherein the temperature of the gas at the discharge from the atomisation chamber (4) is between approximately 90° and approximately 220°C.

Claim 16 (Withdrawn): Method according to Claim 15, wherein the temperature of the gas emerging from the atomisation chamber is between approximately 105° and approximately 170°C.

Claim 17 (Withdrawn): Method according to Claim 11, wherein the gas is air.

Claims 18-20 (Cancelled)

Claim 21 (Previously presented): Oxidised zinc compound according to Claim 7, wherein the micro-spherules have a D_{50} of between approximately 70 and approximately 90 μm .